

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-14. (Cancelled).

15. (Currently Amended) A method of screening for a drug candidate compound or its salt wherein said drug candidate compound or its salt inhibits the activity of expression of a gene encoding a protein comprising the amino acid sequence of SEQ ID NO:1, or an amino acid sequence having at least 80% homology to the amino acid sequence of SEQ ID NO: 1, wherein said protein has a neurofibrillary degeneration promoting activity or a neuronal cell death promoting activity,

wherein said compound or its salt is a candidate for a prophylactic or therapeutic agent for neurodegenerative disease or diabetes,

wherein said method comprises:

~~comparing~~ (i) culturing a cell culture comprising a polynucleotide encoding said protein or a partial peptide of said protein with;

(ii) culturing a the cell culture of (i) further comprising the polynucleotide in the presence of a test compound;

(iii) assaying the degree of changes in nerve fibers to determine the neurofibrillary degeneration promoting activity in (i) and (ii); wherein said assaying comprises comparing said changes.

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16-50. (Cancelled).

51. (New) A method of screening for a drug candidate compound or its salt, wherein said drug candidate compound or its salt inhibits the activity of a protein comprising the amino acid sequence of SEQ ID NO:1,

wherein said compound or its salt is a candidate for a prophylactic or therapeutic agent for neurodegenerative disease or diabetes,

wherein said method comprises:

- (i) culturing a cell comprising a polynucleotide encoding said protein;
- (ii) culturing a cell comprising said polynucleotide in the presence of a test compound;
- (iii) adding a death inducer selected from tunicamycin, thapsigargin, 2-deoxyglucose, β -amyloid, okadaic acid and homocysteine to said cells, and assaying the degree of axonal degeneration, the mitochondrial respiratory activity, the LDH level in the culture supernatant or the DNA break level to determine the cell death promoting activity in (i) and (ii); and
- (iv) comparing the cell death promoting activities of (iii).

52. (New) A method of screening for a drug candidate compound or its salt wherein said drug candidate compound or its salt inhibits the activity of a protein comprising the amino acid sequence of SEQ ID NO:1,

wherein said compound or its salt is a candidate for a prophylactic or therapeutic agent for neurodegenerative disease or diabetes,

wherein said method comprises:

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- (i) culturing a cell comprising a polynucleotide encoding said protein;
 - (ii) culturing a cell comprising said polynucleotide in the presence of a test compound;
 - (iii) assaying the binding of said protein to Akt1 protein within the cells in (i) and (ii);
- and
- (iv) comparing the bindings of said protein to Akt1 protein within the cells of (iii).

53. (New) A method of screening for a drug candidate compound or its salt wherein said drug candidate compound or its salt inhibits the activity of a protein comprising the amino acid sequence of SEQ ID NO:1,

wherein said compound or its salt is a candidate for a prophylactic or therapeutic agent for neurodegenerative disease or diabetes,

wherein said method comprises:

- (i) culturing a cell comprising a polynucleotide encoding said protein and a reporter gene bearing the binding sequence of NF- κ B contained in the promoter or enhancer;
- (ii) culturing a cell comprising said polynucleotide and the reporter gene in the presence of a test compound;
- (iii) measuring the reporter gene expression level using the reporter protein activity in (i) and (ii); and
- (iv) comparing the reporter gene expression levels using the reporter protein activity of (iii).